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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,679	06/27/2001	Edward Eric Thomas	50037.15US01	3964

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EXAMINER

AL HASHEMI, SANA A

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,679

Applicant(s)

THOMAS ET AL.

Examiner

Sana Al-Hashemi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/23/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims Status: 1-17 are rejected.

Specification

2. Claims 1-17 are objected to because of the following informalities: the term "if" is an alternative term and it's not acceptable in the claims. Appropriate correction is required.
3. Claim 10 is objected to under 37 CFR 1.75(c) as being in improper form because a dependent on itself. Correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-17 are rejected under 35 U.S.C. as being anticipated by Mosher (US Patent No. 5,799,322).

Regarding Claims 1, and 8, Mosher discloses a method for synchronization, comprising:

- (a) a synchronization initiator sending a sync key to a synchronization partner (column 7, lines 33-35, Mosher);

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(b) determining a desired synchronization state to synchronize from based on the sent sync key (column 7, lines 35-40, Mosher); and

(c) the partner determining if the sent sync key is valid, and if the sync key is valid (column 7, lines 44-45, Mosher¹):

(i) attempting to synchronize with the initiator from the desired synchronization state to a current state (column 7, lines 45-52, Mosher²); and

(ii) determining if the attempted synchronization was successful (column 8, lines 1-7, Mosher³).

Regarding Claim 2, Mosher discloses a method, wherein determining the desired synchronization state to synchronize from based on the sent sync key, further comprises:

(a) determining a value of the sent sync key (column 8, lines 8-20, Mosher⁴); and

(b) setting the desired synchronization state based on the value of the sent sync key (column 8, lines 26-35, Mosher).

Regarding Claim 3, Mosher discloses a method, wherein determining if the sent sync key is valid further comprises determining if a partner sync key exists related to the sent sync key; and if so:

(a) determining a previously stored value of the partner sync key (column 8, lines 53-61, Mosher); and

(b) comparing the value of the partner sync key to the value of the sent sync key (column 19, lines 18-26, Mosher).

¹ Examine interprets the receiver corresponds to the partner.

² Examiner interprets the start or restart in Mosher corresponds to the initiator.

³ The step of verifying the status either committed or aborted corresponds to the attempted synchronization was successful.

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Regarding Claim 4, Mosher discloses a method, wherein setting the desired synchronization state based on the value of the sent sync key (column 8, lines 61-67, Mosher), further comprises:

determining if the desired synchronization state is an initial synchronization state based on the value of the sent sync key (column 9, lines 1-3, Mosher⁵); and

(b) determining if the desired synchronization state is another valid synchronization state based on the value of the sent sync key (column 9, lines 1-3, Mosher⁶).

Regarding Claim 5, Mosher discloses a method, wherein determining if the attempted synchronization was successful, further comprises:

(a) the synchronization initiator determining if the synchronization was successful (column 9, lines 4-9, Mosher), and if so:

updating the sync key on the initiator (column 9, lines 10-13, Mosher); and

(b) the synchronization partner determining if the synchronization was successful (column 9, lines 13-16, Mosher), and if so:

updating the partner sync key (column 9, lines 17-21, Mosher).

Regarding Claim 6, Mosher discloses a method, wherein determining if the desired synchronization state is another valid synchronization state based on the value of the sent sync key, further comprises, determining if the value of the sent sync key corresponds to a stored synchronization checkpoint (column 9, lines 21-28, Mosher).

Regarding Claim 7, Mosher a method, wherein the sent sync key is an integer and the partner sync key is an integer (column 10, lines 2-9, Mosher).

⁴ Examiner interprets the stop update in Mosher corresponds to the value of the sent sync key.

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Regarding Claim 9, Mosher discloses a computer-readable medium, further comprising:

- (a) determining if the attempted synchronization was successful (column 8, lines 1-7, Mosher⁷); and
- (b) updating the value of the sent sync key if the synchronization was successful (column 9, lines 17-21, Mosher).

Regarding Claim 10, Mosher discloses a computer-readable medium, wherein determining the desired synchronization state from the sent sync key, further comprises:

- (a) determining a value of the sent sync key (column 8, lines 8-20, Mosher⁸);
- (b) locating a server sync key having a value (column 11, lines 5-13, Mosher);
- (c) comparing the value of the sent sync key to the value of the server sync key (column 19, lines 18-26, Mosher); and
- (d) setting the desired synchronization state based on the comparison (column 8, lines 26-35, Mosher).

Regarding Claim 11, Mosher discloses a computer-readable medium, wherein setting the desired synchronization state based on comparison, further comprises:

- (a) setting the desired synchronization state to an initial synchronization when the value of the sent sync key is zero (column 19, lines 52-60, Mosher⁹); or

⁵ The step of commit/abort corresponds to determining the state value.

⁶ The step of commit/abort corresponds to determining the state value.

⁷ The step of verifying the status either committed or aborted corresponds to the attempted synchronization was successful.

⁸ Examiner interprets the stop update in Mosher corresponds to the value of the sent sync key.

⁹ When the replication fails the value is zero.

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(b) setting the desired synchronization state to a stored synchronization state of the server when the comparison determines that the value of the sent key relates to a stored synchronization state (column 19, lines 35-51, Mosher).

Regarding Claim 12, Mosher discloses a computer-readable medium, wherein determining if the attempted synchronization was successful, further comprises:

(a) the client determining if the synchronization was successful (column 8, lines 1-7, Mosher), and
if so: updating the value of the sent sync key; and

(b) the server determining if the synchronization was successful (column 13, lines 11-15, Mosher), and if so
updating the value of the server sync key (column 13, lines 16-24, Mosher).

Regarding Claim 13, Mosher discloses a computer-readable medium, wherein updating the value of the sent sync key and updating the value of the server sync key, further comprises:

incrementing the value of the sync key stored on the client and the server sync key
(column 19, lines 27-34, Mosher).

14. A system for synchronizing data, comprising:

- (a) a processor and a computer-readable medium;
- (b) an operating environment stored on the computer-readable medium and executing on the processor (column 6, lines 29-35, Mosher);
- (c) a communication connection device operating under the control of the operating environment (column 6, lines 35-39, Mosher); and

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(d) a synchronization device operating under the control of the operating environment and operative to perform actions (column 6, lines 40-46, Mosher), including:

(i) receiving or sending a sync key to a synchronization partner (column 7, lines 8-16, Mosher);

(ii) determining a desired synchronization state from the sync key (column 19, lines 52-60, Mosher);

(iii) synchronizing with the client from the desired synchronization state to current state (column 9, lines 4-9, Mosher); and

(iv) determining if the synchronization was successful (column 8, lines 1-7, Mosher¹⁰).

Regarding Claim 15, Mosher discloses a system, further comprising updating the sync key if the synchronization was successful (column 8, lines 1-7, Mosher).

Regarding claim 16, Mosher discloses a system, wherein determining the desired synchronization state from the sync key, further comprises:

(a) determining a value of the sync key (column 8, lines 8-20, Mosher¹¹);

(b) setting the desired synchronization state based on the value of the sync key column 8, lines 26-35, Mosher).

Regarding Claim 17, Mosher discloses a system, wherein determining if the attempted synchronization was successful (column 8, lines 1-7, Mosher), further comprises determining if the synchronized data was processed, and if so updating the value of the sent sync key (column 13, lines 16-24, Mosher).

Conclusion

Other Prior Art Made of Record

- 1- Mosher Jr. (US Patent No. 5,799,322) disclose system and method for stopping updates at specified timestamp in a remote duplicate database facility.
- 2- Zhang et al. (US Patent No. 6,553,409) discloses background cache synchronization.
- 3- Yanai et al. (US Patent No. 6,502,205) discloses a synchronous remote data mirroring system.
- 4- Rosenthal et al. (US Patent No. 5,224,212) discloses a synchronous operation in a database management system.

¹⁰ The step of verifying the status either committed or aborted corresponds to the attempted synchronization was successful.

¹¹ Examiner interprets the stop update in Mosher corresponds to the value of the sent sync key.

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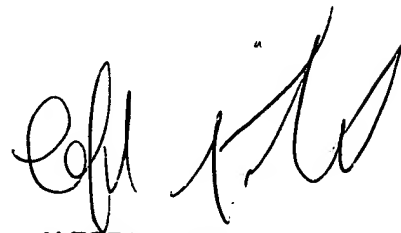
Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to: Sana Al-Hashemi whose telephone number is (571) 272-4013.

The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (571) 272-4023. Any response to this office action should be mailed to: The Commissioner of Patents and Trademarks, Washington, D.C. 20231. Or telefax at phone number (703) 872-9306. For formal or draft communications, please label

"PROPOSED" or "DRAFT". Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, 6th Floor Receptionist, Arlington, Virginia. 22202.

Sana Al-Hashemi
Patent Examiner
Technology Center 2100
December 17, 2004



**ALFORD KINDRED
PRIMARY EXAMINER**